progression-free survival. Timing of molecular testing via polymerase chain reaction (PCR) varies. Once patients have achieved and maintained MMR ≥12 months, 3 panelists would reduce the frequency of cytogenetic testing and 3 would cease cytogenetic testing. Mutational analysis is not routinely conducted in responding patients; however, when performed in the second- and third-line settings, mutational analyses are generally conducted once or twice yearly. Healthcare resource utilization was higher in patients with advanced-phase disease and was 2-3 times higher in nonresponders than responders. **CONCLUSIONS:** CML treatment and monitoring practices may not align with guidelines; furthermore, patient management may differ markedly between treatment settings. Monitoring disease burden using PCR is expected to become increasingly important with standardization, and new therapies are anticipated to yield deeper responses.

PCN13

REAL LIFE OUTCOMES IN 2ND LINE ADVANCED OR METASTATIC NON-SMALL CELL LUNG CANCER (NSCLC): A PILOT STUDY IN FRANCE AND GERMANY ANALYSING ERLOTINIB VERSUS CHEMOTHERAPY

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BACKGROUND: Erlotinib is an EGFR TKI inhibitor used as monotherapy in second-line NSCLC patients. Clinical studies have demonstrated the survival benefits of erlotinib, however outcomes from routine clinical practice have not previously been assessed in Europe. **OBJECTIVES:** To investigate Time to Progression (TTP) and thus to assess the feasibility of such studies in a European setting. The primary comparison was erlotinib versus chemotherapy in second-line NSCLC. **METHODS:** Data were drawn from the Adelphi NSCLC Disease Specific Programme, a large cross-sectional study of consecutively presenting patients in France and Germany in 2010. Physicians provided retrospective information regarding disease status and treatment patterns. TTP was defined as time from start of second-line treatment to physician-reported disease progression or two weeks before the start of third-line therapy. A log rank test was applied to test for differences between the two comparison groups. Sensitivity analyses on the treatment effect were run on EGFR mutation wild-type and non-tested patients. **RESULTS:** 521 patients receiving second line therapy were included in the analyses, of which 123 were receiving erlotinib and 398 were receiving other chemotherapy regimens. 60 patients were EGFR mutated, 150 were EGFR wild type and 311 were not tested. Only 19 erlotinib and 83 non-erlotinib patients had progressed. The median time to progression for erlotinib patients was 17 months compared with 9.5 months in the comparison group. The Hazard ratio relating to the treatment effect (erlotinib versus non-erlotinib) was 0.63 (95% CI 0.38 to 1.05) p=0.07. The results of the sensitivity analysis on the EGFR mutation wild-type and non-tested patients resulted in a Hazard ratio of 0.65, p=0.13. **CONCLUSIONS:** The feasibility of using real life oncology data has been demonstrated. TTP observed for erlotinib and chemotherapy was similar, independent of mutation status, in second-line NSCLC.

PCN14

UNMET NEED IN METASTATIC PROSTATE CANCER PATIENTS: RESULTS FROM A SYSTEMATIC REVIEW

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OBJECTIVES: Docetaxel (D) + prednisone (P), mitoxantrone (MTX), estramustine (E) and sipuleucel-T (S) are authorized in the US for castrate-resistant prostate cancer (CRPC) treatment. New agents such as abiraterone and zibotentan are being investigated. This systematic review aims to assess current clinical evidence of treating metastatic CRPC (mCRPC). **METHODS:** MEDLINE, Embase, and Cochrane were searched to March 22, 2010, as were abstracts from ASCO, ASCO GU, AUA, ESMO, and EAU (2006 – March 2010). RCTs and observational studies (English) were included. Endpoints extracted include overall survival (OS), progression-free survival (PFS), prostate-specific antigen (PSA) response, and adverse events (AEs). **RESULTS:** A total of 171 studies (331 publications) were included: prechemotherapy patients (71 RCTs, 15 observational), postchemotherapy patients (6 RCTs, 71 observational), and mixed populations (8 RCTs). D, P, and E were most commonly investigated. In postchemotherapy RCTs, D + P + custirsen (14.7 mos) and cabazitaxel + P (15 mos) exhibited a relatively high OS compared to other regimens. Regimens with D and MTX showed longer PFS versus other regimens. D regimens were associated with a high PSA response (40%). In postchemotherapy observational studies, D + bevacizumab showed a relatively high OS (17.5 mos) and PFS (8.9 mos). In prechemotherapy RCTs, S (26 mos) and D + P (27 mos) showed a high OS. D + P showed a favorable PFS (11 mos), as did E + etoposide (15 mos). Overall, PRO, bone pain, and skeletal-related events were rarely reported in these studies. Nausea, anemia, diarrhea, neutropenia, and thrombocytopenia were common across trials. Grade 3/4 AEs were frequently reported with D-based regimens. **CONCLUSIONS:** mCRPC remains a clinical challenge. D was frequently investigated. D improved survival but produced significant AEs. New treatments for D-refractory patients are needed.

PCN15

CORRELATES FOR HUMAN PAPILLOMA VIRUS VACCINATION UPTAKE IN A LARGE HEALTH ORGANIZATION IN ISRAEL

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OBJECTIVES: To assess the coverage of HPV immunizations two years since their introduction, and to determine factors associated with vaccination. **METHODS:** The present research has been conducted in Maccabi Healthcare Services, the second largest HMO in Israel. The study population consisted of women aged 8 to 43. Multivariate analyses were used to determine independent association of various factors with vaccination. **RESULTS:** The study population included 482,748 women, of which 3.8% purchased at least one HPV vaccine dose. HPV vaccine initiation was strongly associated with socioeconomic level, with chances for immunization being approximately 35-fold higher in the highest SES index as compared to the lowest. High proportion of women aged 21-25 were vaccinated, but the rate in younger girls, who are the target population were much lower. **CONCLUSIONS:** HPV immunizations, which are not part of the current Israeli immunization program, are purchased mainly by women older than 20 years from high socio-economic classes.

PCN16

MAJOR CHANGES IN CHEMOTHERAPY REGIMENS ADMINISTERED TO BREAST CANCER PATIENTS DURING 2000-2008

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OBJECTIVES: To determine the trends in type of chemotherapy regimens administered to early stage or metastatic breast cancer patients in daily practice, as this information is lacking in published literature. **METHODS:** Newly diagnosed breast cancer patients in the period 2000-2008 who received chemotherapy were selected from the Dutch ECR-PHARMO cohort. The ECR (Eindhoven Cancer registry) records data on all newly diagnosed cancer patients in the Southeastern Netherlands whereas the PHARMO RLS (PHARMO Record Linkage System) includes data on, among other things, in- and outpatient drug use. Chemotherapy regimens were classified based on the received combinations and sequences. Trends in the distribution of adjuvant chemotherapy regimens (for early stage breast cancer) and palliative chemotherapy regimens (for metastatic breast cancer) were determined and stratified by Her2/neu status when possible. **RESULTS:** In this study, 422 patients diagnosed with early stage breast cancer received adjuvant chemotherapy. The use of CMF decreased from 90% in 2000 to almost none since 2005. Administration of anthracyclines (without taxanes) increased from 4% in 2000 to 94% in 2005, but lowered to 60% in 2008, being replaced by both trastuzumab and taxanes (with or without anthracyclines). Among the 82 breast cancer patients who received palliative chemotherapy at diagnosis or after breast cancer recurrence, the use of CMF and anthracyclines (without taxanes) decreased (0% and 15% in 2008, respectively), while the use of taxanes (with or without anthracyclines) increased (26% in 2008). Trastuzumab was used as palliative chemotherapy from 2003 onwards, with 22% of the metastatic breast cancer patients receiving trastuzumab containing regimens in 2008, and bevacizumab was administered since 2007 with 19% of the patients receiving bevacizumab containing regimens in 2008. **CONCLUSIONS:** Key findings on chemotherapeutic treatment for breast cancer patients from large clinical trials have been incorporated in the Dutch guidelines resulting in major changes in patient care.

PCN17

MULTI-COHORT MODEL OF PREVALENCE ESTIMATION OF ADVANCED MALIGNANT MELANOMA IN THE UNITED STATES: RESULTS COMPARED TO SEER DATA

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OBJECTIVES: There is an increase in incidence of malignant melanoma (MM). However, there is no systematic estimation of prevalence of advanced MM in the US. The SEER registry does not provide prevalence by tumor stage or data on tumor recurrence rates. This study takes a public health approach in reporting MM prevalence rate and future trend by tumor stage and age. The objective of this study is to build upon SEER data to inform public health interventions. **METHODS:** An excel-based, multi-cohort natural history model was developed. It employed age- and stage-specific incidence, recurrence, and all-cause mortality rates, and the US Census data from up-to-date SEER data and literature. The estimations were projected to 2015. **RESULTS:** Our model estimated that there were approximately 1.2 million MM cases (376 per 100,000 people) in the US in 2010. Of which, (24.4%) were in advanced stages (regional: 169,975 (14.6%); distant: 114,666 (9.8%)). The estimated prevalence rate of advanced MM in 2010 was 92 per 100,000 people. Among these advanced cases, 149,148 cases (52.4%) were in the elderly (≥ 65y). The total cases of MM of all stages and advanced cases were projected to increase from 2010 to 2015 by 38.4% and 57.9%, respectively. When compared to the latest SEER reported national MM prevalence of all stages in 2007 (793,283 cases), our estimate for the same year was 965,933 cases, or 21.8% higher, due to difference in projection methodology. Of these 2007 MM cases, 332,149 (41.9%) and 429,479 (44.5%) were estimated to be in the elderly. **CONCLUSIONS:** Prevalence of advanced MM is projected to increase in the next five years. These estimates help enhance public health awareness. An accurate estimation of disease burden is essential in prioritizing health care resource allocation and in identifying unmet needs from disease prevention to treatment.